USDA

United States Department of Agriculture

Office of the Secretary
Washington, D.C. 20250

Mr. Kenneth G. Ammon
Director
Water Supply Department
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

Dear Mr. Ammon:

Thank you for your letter of June 28, 2002, requesting that the Department of Agriculture (USDA) review and comment on the draft document, "Reservations of Water for the Environment and Assurances for Existing Legal Sources Consistent with Federal and State Law." We are interested in water conservation in providing an adequate supply of water for all purposes, as outlined in the Comprehensive Everglades Restoration Plan for South Florida.

USDA's preliminary comments are included as an enclosure to this letter. We look forward to working with the Federal and State agency partners for this project.

Again, thank you for writing and providing us with the opportunity to be involved in identifying the methodology for protecting this water resource.

If you have any questions, or if you need further assistance, please contact Ronald Marlow, Director of the Conservation Engineering Division, Natural Resources Conservation Service, at (202) 720-2520.

Sincerely,

Mack Gray

Mack Gray
Deputy Under Secretary
Natural Resources and Environment

Enclosure

U.S. DEPARTMENT OF AGRICULTURE

Comments

Reservations of Water for the Environment and Assurances for Existing Legal Sources Consistent with Federal and State Law

General Comments

The document needs to address changes in water consumption by urban and agricultural users through Best Management Practices (BMP). There are water conservation efforts in existence, such as the Mobile Irrigation Labs, that educate the public on water conservation. There are also cost-share programs by the Florida Department of Agricultural and Consumer Services and the USDA Natural Resources Conservation Service. These programs focus on improving the efficiency of agricultural irrigation systems.

There are assumptions in the Central and Southern Florida Project Comprehensive Review Study that account for additional water available to the natural system by reducing consumption. This will require some discussion of how these types of changes will be handled in future calculations of legal water reservations.

Specific Comments

1. Page 11, rows 41-43

Suggest that the ongoing interagency team setup ((through the Comprehensive Everglades Restoration Plans (CERP) RECOVER process)) be named. As a result, the question arises of whether the identification of a base case assumption has been assigned to a specific RECOVER team. The determination of the base case assumption might best be determined by the Initial CERP Update Project Delivery Team.

2. Page 13, rows 11-18 & Page 14, rows 12-25

There is more to estimating supplemental irrigation requirements than the determination of the evaporation-transpiration (ET) method used. USDA Natural Resources Conservation Service has formally adopted the Penman-Monteith (PM) equation as our Agency's official ET model and procedure. Our recently issued NEH Part 623, Chapter 2, Crop Water Requirements, presents this procedure. AFSIRS uses a modified Penman approach.

A good reference is the St. Johns River Water Management Report, Evaluation of Reference Evapotranspiration Methodologies and AFSIRS Crop Water Use Simulation Model (http://sjr.state.fl.us/programs/outreach/pubs/techpubs/sj2001-sp8.pdf).

Permitted usage is significantly different than actual usage. This type of usage is based on the amount of water that is needed to supply irrigation requirements for a certain level of service during a drought. This could mean that the permitted usage amount would be that amount of irrigation needed during 1 in 10 drought years. Actual usage is based upon the current weather. A wet growing season means less need for irrigated water.

Calculation of actual irrigation water usage is very site specific. The actual amount of water used is based not only on the weather, rainfall and crop evapo-transpiration, but the type of irrigation system of its corresponding irrigation efficiency. The water amount is also used to determine the irrigation scheduling method of the farm operator.

3. Page 24, rows 4-8

Agricultural users withdraw water from both the C-23 and the Floridan Aquifer. One of the goals of the IRL Project is to reduce usage of the Floridan Aquifer by replacing that usage with water from the IRL reservoir supplies. The shift would be from C-23 and Floridan Aquifer usage to IRL reservoir usage.